

REMARKS

By this Amendment, claims 1-24 are amended merely to clarify the recited subject matter and correct grammatical inconsistencies. Claims 1 and 13 are independent. Upon entry of this Amendment, claims 1-24 will remain pending.

I. Specification

The Applicant has submitted an Abstract of the Disclosure herewith on a separate sheet.

II. Claim Rejections – 35 U.S.C. § 112

The Examiner rejected claims 1, 10, 13, and 22 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention.

As to claims 1 and 13, the Applicant has replaced the limitation “cellular radio network for office use” with the limitation “micro or pico cell network.” Support for this amendment is found, for example, on page 4, line 30 through page 5, line 12 of the Specification.

As to claims 10 and 22, the Applicant has replaced the term “building” with “configuring.” Support for this amendment is found, for example, on page 10, lines 1-4 of the Specification.

The Applicant respectfully submits that the above amendments overcome the Examiner’s rejection of claims 1, 10, 13, and 22 under 35 U.S.C. § 112, second paragraph, and respectfully requests that the rejection be withdrawn.

III. Claim Rejections – 35 U.S.C. § 103

Claims 1-9, 12-21, and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Leitch et al. (U.S. Patent No. 6,163,698) and further in view of Ostrup et al. (U.S. Patent No. 6,205,336). Claims 10-11 and 22-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Leitch/Ostrup and further in view of Plaschke et al. (U.S. Patent No. 6,022,622). Applicants traverse the rejections because none of the cited references, taken alone or in combination, teaches all the features of the claims.

A. Claims 1-9, 12-21, and 24

1. Leitch

Leitch relates to setting up a link for a call, or in other words, channel selection for a particular connection. Leitch merely discloses a channel allocation method involving N determined groups (12 groups in Figure 2) of traffic channels, each having a monitoring channel (col. 3, lines 37-51) at the center of a frequency band of the traffic channels. Referring to Figure 3, after the SCR (e.g., a mobile phone, col. 2, lines 41-44) has an established connection, it starts measuring the monitoring channels and reports to the network the best, next best, and worst interfering monitoring channels. According to Figure 4 (also claim 1), the best available resources at that particular moment are allocated to an SCR. That Leitch discloses a method for a particular connection is underscored by the fact that the monitoring channels measured by Leitch are traffic channels, and thus the channel quality situation is subject to rapid changes.

In contrast to the claimed invention of independent claims 1 and 13, Leitch does not teach or suggest, inter alia:

A method for performing channel configuration in a micro or pico cell network located in the operating area of a macro cell network, comprising, [inter alia]:

selecting as the channel to be tested a logical control channel to be transmitted on the physical channel of a macro cell in the macro cell network,

selecting as the channel to be tested the next control channel of a macro cell of the macro cell network until the control channels of all desired macro cells have been tested, (See, e.g., claim 1.)

In the claimed invention, the micro or pico cell network measures and configures control channels of the surrounding macro cell network to be used in the micro or pico cell network. Control channels have a most consistent load level at any point in time (e.g., at night). Therefore, the results obtained from measurements on control channels provide the most reliable basis for channel configuration in the micro or pico cell network. In other words, the claimed invention selects channels for a long-term use. Leitch, which selects channels for a particular connection, in no way teaches or suggests the above-recited features.

2. Ostrup

Ostrup fails to remedy the deficiencies of Leitch because Ostrup merely discloses a method in which a service is first requested on a first level of cell hierarchy (e.g., the pico-cell level, cells 18 to 24 in Fig. 1), and if not available, the service is requested from the higher cell-level including larger cells (cells 14 to 16), and so on (Abstract, Figure 1, and col. 2, lines 51-56). Ostrup only discloses allocation and measurement of traffic channels, and does not disclose, inter alia:

A method for performing channel configuration in a micro or pico cell network located in the operating area of a macro cell network, comprising, [inter alia]:

selecting as the channel to be tested a logical control channel to be transmitted on the physical channel of a macro cell in the macro cell network,

selecting as the channel to be tested the next control channel of a macro cell of the macro cell network until the control channels of all desired macro cells have been tested, (See, e.g., claim 1.)

3. The Combination of Leitch and Ostrup Does Not Teach All the Features of the Claimed Invention

Assuming arguendo that a person of ordinary skill in the art were motivated to combine the teachings of Leitch and Ostrup, the combination would not teach all the features of the invention claimed by claims 1 and 13. In particular, the channel model of Leitch as applied to Ostrup would result in a system where traffic channels would be allocated for pico cells (18 to 24 in Fig. 1 of Ostrup) based on measurements on traffic channels in neighboring pico cells and traffic channels in higher level cells (10 to 16). Such an arrangement would result in a channel allocation system on a call-by-call basis, and no long-term channel configuration would be obtained. Ostrup teaches away from the present invention by teaching that the resources to be used shall be dynamically selected from a different level of hierarchy, if needed. Accordingly, in the combination of Leitch and Ostrup, the quality of the channels in pico cells (18 to 24) would thus be highly dependent on the channel allocation situation in higher-level cells, and the quality of certain channels in pico cells would change frequently.

In the claimed invention, in contrast, the micro or pico cell network uses channels that are allocated for control channel purposes in the higher-level cells, which provides the

advantage that the quality of channels used in the micro or pico cell network is more consistent.

4. Conclusion

For at least the above reasons, the Applicant respectfully submits that independent claims 1 and 13 are not obvious over Leitch in view of Ostrup. Claims 2-9, 12, 14-21, and 24, which respectfully depend from claims 1 and 13, are not obvious for at least the above reasons.

B. Claims 10-11 and 22-23

Plaschke does not remedy the above-described deficiencies with respect to claims 1 and 13. Plaschke merely discloses a system that dynamically allocates wireless communication channels to improve communication and reduce interference.

For at least the above reasons, claims 1 and 13 are not obvious over Leitch/Ostrup in view of Plaschke. Claims 10-11 and 22-23, which respectively depend from claims 1 and 13, are not obvious for at least the above reasons.

IV. Conclusion

All rejections and objections have been addressed. It is respectfully submitted that the present application is now in condition for allowance, and a notice to that effect is earnestly solicited. Should there be any questions or concerns regarding this application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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